LMEC B030731
Copy 2 of 5

JOINT MESSAGEFORM

SECURITY CLASSIFICATION [redacted]

SPACE BELOW RESERVED FOR COMMUNICATION CENTER

LXRT

W 2210 1163

PRECEDENCE	TYPE MSG (CHECK)			ACCOUNTING SYMBOL	ON(D) OR REFERS TO	CLASSIFICATION OF REFERENCE
ACTION	BOOK	MULTI	SINGLE			
INFO						

FROM:
6595TH AEROSPACE TEST WING, VANDENBERG AFB, CALIF.
VWZD

SPECIAL INSTRUCTIONS

TO:
SPACE SYSTEMS DIV. LOMA, CALIF.

SUBJECT: EIGHT-HOUR FLASH REPORT

1. SUMMARY VW20 93-9-409

A VEHICLE CONSISTING OF SLV-2A BOOSTER NO. 383 AND S-6A ORBITAL STAGE NO. 1163 WAS LAUNCHED ON THE FIRST ATTEMPT FROM VAFB COMPLEX 75-1, PAD 2, AT 1600:00.20 PDT, ON 23 SEPTEMBER 1963. THE PRIMARY LAUNCH OBJECTIVE, TO PLACE THE S-6(A) SATELLITE WITH PAYLOAD IN A NEAR-POLAR ORBIT, WAS ACCOMPLISHED.

THE COUNTDOWN PROGRESSED SMOOTHLY WITHOUT ANY MAJOR DIFFICULTIES BEING ENCOUNTERED OR ANY HOLD BEING IMPOSED. LIFTOFF OCCURRED AT THE OPENING OF THE LAUNCH WINDOW.

[redacted]

DATE 23 | TIME
MONTH Sep | YEAR 63

WRITER
SYMBOL
TYPED NAME AND TITLE (Signature, if required) F. L. WRIGHT, MAJ, USAF
PHONE 866/3771 | PAGE NO. 1 | NO. OF PAGES
SECURITY CLASSIFICATION [redacted]

RELEASER
SIGNATURE [redacted]
TYPED (or Printed) NAME AND TITLE

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS
DOD DIRECTIVE 5200.10

DD FORM 1 MAY 58 173 REPLACES DD FORM 173, 1 OCT 48, WHICH WILL BE USED UNTIL EXHAUSTED

FROM: 4950TH AEROSPACE TEST WING, VANDENBERG AFB, CALIF. VWZD

THE SECRET PERFORMANCE OF ALL STAGES, GROUND OPERATIONS AND SPACE COMMUNICATIONS APPEARED TO BE SATISFACTORY.

THE VERLORT RADAR AND GROUND GUIDANCE INDICATED THAT THE NOMINAL TRAJECTORY WAS CLOSELY FOLLOWED THROUGH INJECTION. INFORMATION BASED ON FIRST PASS ACQUISITION INDICATED THE ATTAINMENT OF AN ADEQUATE ORBIT AND THAT THE BASIC VEHICLE SUBSYSTEMS WERE FUNCTIONING SATISFACTORILY.

[redacted]

PRELIMINARY VALUES OF SIGNIFICANT LAUNCH EVENTS ARE:

[redacted]	ZERO
VEHICLE LIFTOFF ON SOLID MOTORS	27.5 SEC
SOLID MOTOR THRUST TERMINATION	38.9 SEC
SOLID MOTOR JETTISON	45.1 SEC
[redacted]	92.40 SEC
[redacted]	144.4 SEC
S-1 COMMAND FOR MECO (LOCKED OUT)	146.99 SEC
MECO (PROPELLANT DEPLETION)	147.04 SEC

JOINT MESSAGEFORM - CONTINUATION SHEET | SECURITY CLASSIFICATION [redacted]

FROM: [redacted]

[redacted]

VEGA 155.73 SEC

SEPARATION COMMANDED 160.57 SEC

SEPARATION COMPLETE 162.89 SEC

VEHICLE ROCKET IGNITION 164.92 SEC

S-IVA ENGINE IGNITION 167.88 SEC

S-IVA THRUST ATTAINMENT (90 PERCENT Fn) 169.1 SEC

BEGIN S-IVA STEERING 180.03 SEC

SATURN GUIDANCE SYSTEM ACQUISITION 230 SEC

END S-IVA STEERING 350.95 SEC

ENABLE S-IVA VELOCITY METER 351.28 SEC

S-IVA ENGINE SHUTDOWN (VELOCITY METER) 619.43 SEC

VTS VEHICLE RADAR LOSS OF TRACK 685 SEC

VTS ACQUISITION BEACON FAIL 435 SEC

VTS TELEMETRY DATA FAIL (LINK 1) 437 SEC

VTS TELEMETRY RADAR STATION FAIL (LINK 2) 440 SEC

VEHICLE RADAR FAILURE 499 SEC

III. GUIDANCE PERFORMANCE

ALL GUIDANCE SYSTEMS PERFORMED ADEQUATELY FOR ACHIEVEMENT OF THE PRIMARY TEST OBJECTIVES.

MAIN ENGINE CUTOFF (MECO) OCCURRED BY PROPEL-

LANT DEPLETION AS PLANNED.

[redacted]

SYMBOL	PAGE NO. 3	NR OF PAGES	SECURITY CLASSIFICATION [redacted]	INITIALS

DD FORM MAY 62 1731

[redacted]

U.S. GOVERNMENT PRINTING OFFICE: 1966—

JOINT MESSAGEFORM - CONTINUATION SHEET

SECURITY CLASSIFICATION [redacted]

FROM:
6595TH AEROSPACE TEST WING, VANDENBERG AFB, CALIF. VWZD

[illegible] ACTUATION TIMES INDICATE THAT PROPELLANT UTILIZATION WAS SATISFACTORY.

IV. GROUND GUIDANCE.

PERFORMANCE OF THE COMMAND GUIDANCE SYSTEM APPEARS TO HAVE BEEN SATISFACTORY. THE MECO [illegible], WHICH WAS LOCKED OUT OF EFFECTIVENESS, [illegible] PROPELLANT DEPLETION BY 4.14 SEC. [illegible] GUIDANCE COMMANDS COMPENSATED FOR THE EXTRA VELOCITY PROVIDED BY THE SLV-2A. QUICK LOOK EVALUATION OF THE TRAJECTORY VECTOR AT GUIDANCE TERMINATION PREDICTED THE FOLLOWING VALUES:

[illegible] ALTITUDE OF 100.[illegible] NM (NOMINAL 100.125 NM)

[illegible] FLIGHT PATH ANGLE - 0.[illegible] DEG (NOMINAL - 0.[illegible] DEG)

ORBITAL PERIOD OF [illegible] MIN (NOMINAL [illegible] MIN)

ORBITAL INCLINATION ANGLE OF [illegible].042 DEG (NOMINAL [illegible] DEG)

BASED ON FIRST PASS ACQUISITION THE ORBITAL PERIOD APPEARS TO BE NORMAL.

[redacted]

SYMBOL	PAGE NO.	NO. OF PAGES	SECURITY CLASSIFICATION	INITIALS
[redacted]	4		[redacted]	

DD FORM MAY 58 173-1

[redacted]

U.S. GOVERNMENT PRINTING OFFICE: 1958-[illegible]

JOINT MESSAGEFORM - CONTINUATION SHEET

SECURITY CLASSIFICATION [redacted]

FROM:

[redacted] VW 2D

Y. [redacted]

[redacted] VEHICLE SUB-SYSTEMS PERFORMED SATISFACTORILY DURING LAUNCH TO PROVIDE ADEQUATE TELEMETRY CONFIDENCE FOR PARTIAL INJECTION. AT THE TIME OF TELEMETRY SIGNAL FADE AT VTR, THE ORBITAL TIMER WAS SET AT 540 SEC (STEP 262) IN THE RESET-ON POSITION, IN THE DECREASE MODE, AND ALTERNATE RE-ENTRY ARMED STATE.

Z. [redacted]

TELEMETRY DATA FROM ALL LINES WERE SATISFACTORILY RECEIVED AND RECORDED.

[redacted] MAINTAINED CONTINUOUS TRACK OF THE BOOSTER REACHED TO HORIZON SIGNAL FADE.

AA. [redacted]

THE COUNTDOWN WAS INITIATED AT [redacted] ON [redacted] 1963 AND PROCEEDED TO LIFTOFF AT THE BEGINNING OF THE SCHEDULED LAUNCH WINDOW. NO [redacted] WERE ENCOUNTERED.

THE FOLLOWING PROBLEMS WERE ENCOUNTERED:

A. [redacted] 6D

SYMBOL		PAGE NO. 6	NO. OF PAGES	SECURITY [redacted]	INITIALS

DD FORM NOV 1963 173-1

[redacted]

U. S. GOVERNMENT PRINTING OFFICE: 1963—[illegible]

JOINT MESSAGEFORM - CONTINUATION SHEET

SECURITY CLASSIFICATION [redacted]

FROM:
6595TH AEROSPACE TEST WING, VANDENBERG AFB, CALIF. [illegible]

[illegible] AGE POWER TRANSFER CIRCUITRY AND WAS REPLACED.

B. THE AGENA BOOSTER CHAMBER MEASUREMENT (MANDATORY FOR LAUNCH) WAS [illegible] THROUGH-OUT THE COUNTDOWN. THE REQUIREMENT WAS WAIVED BY THE AIR FORCE. THE MEASUREMENT YIELDED USEFUL DATA FOLLOWING LIFTOFF.

C. DURING [illegible] TEN PERCENT FUEL LOADING, A [illegible] LEAK OCCURRED IN THE MAST SUPPLY LINE. LEAKAGE WAS DECREASED BY TORQUING A FITTING BUT MINOR LEAKAGE CONTINUED THROUGH LIFTOFF.

D. IN [illegible], INITIAL CHECKS INDICATED [illegible] BATTERY [illegible] VOLTAGE WAS BELOW SPECIFICATION. SUBSEQUENT CHECKS INDICATED THE VOLTAGE WAS WITHIN LIMITS.

VIII. AEROSPACE GROUND EQUIPMENT:

THE AGE FUNCTIONED SATISFACTORILY TO SUPPORT COUNTDOWN AND LAUNCH WITH THE FOLLOWING EXCEPTIONS:

[redacted]

SYMBOL [redacted] | PAGE NR | NR OF PAGES | SECURITY CLASSIFICATION [redacted] | INITIALS

DD FORM 173-1

JOINT MESSAGE FORM / INFORMATION SHEET

FROM: 4595TH AEROSPACE TEST WING, VANDENBERG AFB, CALIF. WED

A. A TIME LEAK OCCURRED IN A FITTING ON THE MAIN.

B. A RELAY FAILED TO ACTUATE IN THE LOGIC CIRCUIT FOR TRANSFERRING FROM EXTERNAL TO INTERNAL POWER, AND LACKING OF THE RELAY RESTORED NORMAL OPERATION.

C. A LAUNCH-READY MONITOR ON THE LOGIC BLOCKHOUSE PAYLOAD CONSOLE MALFUNCTIONED IN TAKE 14. NO REPAIRS WERE MADE.

IX. FAR DAMAGE

FAR DAMAGE WAS GENERALLY GREATER THAN NORMAL DUE TO AN AFTER-FIRE AT THE BASE OF THE MAST CAUSING EXTENSIVE DAMAGE TO CABLING AND PLUMBING. THE EXCESSIVE AMOUNT OF WATER REQUIRED TO EXTINGUISH THE FIRE MAY HAVE DAMAGED THE LAUNCHER. NORMAL TURN AROUND CAN BE MAINTAINED.

SYMBOL | PAGE NO. 7 | NO. OF PAGES | SECURITY CLASSIFICATION | INITIALS

DD FORM MAY 48 173-1